



## DIGITAL WIRELESS LOUDSPEAKERS

### ABSTRACT OF THE DISCLOSURE

A digital wireless loudspeaker system includes an audio transmission device for selecting and transmitting digital audio data, and wireless speakers for receiving the data and broadcasting sound. The audio transmission device selects digital audio data together with a sample clock from a stereo compact disk, or decoded DVD data. The sample clock clocks an element that generates frames of data and adds error protection. Status messages are included in the transmission frames to control speaker attributes such as speaker group, enabling or disabling a sub-woofer, and volume of the loudspeaker digitally. These transmission frames are clocked into an RF transmitter and transmitted to the speakers. The received bit stream and symbol clock are output from the RF receiver in each speaker and input to a framing and error protection decoder and a sample clock generator. The recovered audio sample data and sample clock are input to a digital to speaker input conversion and channel selector.